

**NOTICE OF PROPOSED RULEMAKING**  
**Maricopa County Air Pollution Control Regulations**  
**PREAMBLE**

1. 

|                              |                                 |
|------------------------------|---------------------------------|
| <b><u>Rules Affected</u></b> | <b><u>Rulemaking Action</u></b> |
| Rule 320                     | Amend                           |
  
2. **The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):**  
  
Authorizing and implementing statutes: ARS § 49-479
  
3. **List of all previous notices addressing the proposed rules:**
  - September 16, 1999 Public Workshop (later cancelled) was announced in the 3<sup>d</sup> Quarter 1999 Notice of Public Workshops/Hearings and the 2<sup>nd</sup> Quarter 1999 Visibility Newsletter.
  - October 21, 1999 Public Workshop was announced in the 4<sup>th</sup> Quarter 1999 Notice of Public Workshops/Hearings, the 3<sup>d</sup> Quarter 1999 Visibility Newsletter, and in the Record Reporter on October 6 and 13, 1999.
  - March 2, 2000 Public Workshop was announced in the 1<sup>st</sup> Quarter 2000 Notice of Public Workshops/Hearings, the 1<sup>st</sup> Quarter 2000 Visibility Newsletter, and will be published in the Record Reporter.
  
4. **The name and address of agency personnel with whom persons may communicate regarding the rulemaking:**  
  

|                   |  |
|-------------------|--|
| Name:             | Patricia Nelson, Air Quality Planner         |
| Address:          | 1001 North Central Avenue, Phoenix, AZ 85004 |
| Telephone Number: | 602-506-6709                                 |
| Fax Number:       | 602-506-6179                                 |
  
5. **An explanation of the rule, including the agency's reasons for initiating the rule:**

Maricopa County fails to meet the national ambient air quality standards (NAAQS) for particulates, carbon monoxide, and ozone. The area was reclassified from "moderate" to "serious" nonattainment for particulates in June 1996, for carbon monoxide in July 1996, and for ozone in February 1998. Consequently, Maricopa County must require stricter regulations for certain industries/activities/operations.

Maricopa County is proposing to revise Rule 320 and to submit this rule as a revision to the (Arizona) State Implementation Plan (SIP).

Under Arizona Revised Statutes (ARS) §49-112(A), as enacted in 1994, Maricopa County may adopt rules that are more stringent than or in addition to a provision of the State, provided that the rule is necessary to address a peculiar local condition; and if it is either necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible, or if it is required under a federal statute or regulation, or authorized under an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule is equivalent to federal statutes or regulations; and if any fee adopted under the rule will not exceed the reasonable costs of the county to issue and administer that permit program.

Rule 320 complies with the requirements of ARS §49-112(A) in the following ways: the rule addresses the peculiar local condition of the Maricopa County Nonattainment Area “serious” classification.

6. **A reference to any study that the agency proposes to rely on its evaluation of or justification for the proposed rule and where the public may obtain or review the study, all data underlying each study, any analysis of the study, and other supporting material:**

South Coast Air Quality Management District (Southern California) Rule 1135.

7. **A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable.

8. **The preliminary summary of the economic, small business, and consumer impact:**

This section will be addressed at a later time.

10. **The time, place, and nature of the proceedings for the adoption, amendment, or repeal of the rule or, if no proceeding is scheduled, where, when and how persons may request an oral proceeding on the proposed rule:**

Date: March 2, 2000

Time: 9:00 a.m.

Location: 1001 N. Central Ave., Suite 560, Phoenix, Arizona 85004

Nature: Public Workshop

11. **Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rule:**

Not applicable.

12. **Incorporations by reference and their location in the rules:**

Incorporation by reference (subparts or larger)

40 CFR Part 60, Appendix A, Methods 9 and 19

ASTM Standards: ASTM D129-91, D1552-90, D2622-92, and D4294-90

Location

Section 503

Section 503

13. **The full text of the rules follows:**

## REGULATION III - CONTROL OF AIR CONTAMINANTS

### ODORS AND GASEOUS AIR CONTAMINANTS

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MARICOPA COUNTY  
AIR POLLUTION CONTROL REGULATIONS

REGULATION III - CONTROL OF AIR CONTAMINANTS

RULE 320  
ODORS AND GASEOUS AIR CONTAMINANTS

SECTION 100 - GENERAL

**101 PURPOSE:** To limit the emissions of odors and other gaseous air contaminants into the atmosphere.

**102 APPLICABILITY:** This rule is applicable to all sources.

**103 EXEMPTIONS:** Subsection 302.2 of this rule shall not apply to existing sources, metallurgical plants or other facilities where conversion to sulfuric acid is utilized as a means of controlling emissions to the atmosphere of sulfur dioxide or other compounds.

**SECTION 200 - DEFINITIONS:** For the purpose of this rule, the following definitions shall apply:

**201 ~~FOSSIL FUEL-FIRED STEAM GENERATOR~~** - ~~A furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.~~ **ADVANCED COMBUSTION RESOURCE** - A combustion resource, irrespective of ownership, capable of generating electricity using cogeneration; combined cycle gas turbines; intercooled, chemically recuperated, or other advanced gas turbines; and other advanced combustion processes.

**202 ~~HIGH SULFUR OIL~~** - ~~Fuel oil containing 0.9 percent or more by weight of sulfur.~~ **BOILER**- Any combustion equipment fired with liquid and/or gaseous fuel, which is primarily used to produce steam that is expanded in a turbine generator used for electric power generation.

**203 LOW SULFUR OIL** - Fuel oil containing less than or equal to 0.905 percent by weight of sulfur.

**204 ODORS** - Smells, aromas or stenchs commonly recognized as offensive, obnoxious or objectionable to a substantial part of ~~a the~~ community that is: exposed to the substance.

**205 ~~REDUCTION~~** - ~~Any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating~~ **RENDERING** - The

process of treating animal or vegetable by-products as raw materials by melting or heating so as to convert the matter into fats, proteinaceous material and water.

**206 SPECIFIED SOURCES** – Any building, structure, facility, process, operation or installation that is stationary and subject to a standard of performance in the Maricopa County Air Pollution Control Rules and Regulations.

**207 TOTAL REDUCED SULFUR** – Sulfur in the state wherein the valence of the element is decreased due to the gain of one or more electrons. Total reduced sulfur consists of one or more of the following four compounds: hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide.

**208 UNCLASSIFIED SOURCES** – Any building, structure, facility, process, operation or installation that is stationary and not otherwise subject to a standard of performance in the Maricopa County Air Pollution Rules and Regulations

**SECTION 300 - STANDARDS:** ~~No person shall emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.~~

**301 STANDARDS OF PERFORMANCE FOR ALL SOURCES:** No person shall emit gaseous or odorous air contaminants from any source under his control in sufficient quantities, which either alone or in connection with other substances, by reason of their concentration and duration tend to do one or more of the following:

- a. Injure human, plant or animal life
- b. Damage property
- c. Obscure visibility
- d. Unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of the community exposed to the substance.
- e. Degrade the quality of ambient air below the standards established by the Board of Supervisors.

~~**ANIMAL AND VEGETABLE MATTER REDUCTION:** No person shall operate or use any machine, equipment or other contrivance for the reduction of animal or vegetable matter, separately or in combination, unless all gases, vapors and gas-entrained effluents have been incinerated to destruction at a temperature of not less than 1,300 degrees fahrenheit or processed in a manner determined by the Control Officer to be equally or more effective for the control of air pollution.~~

**302301.1 Odors and Gaseous Air Contaminants in Material Handling and Storage:** ~~**MATERIAL CONTAINMENT REQUIRED:** Volatile – Materials including but not limited to, VOC (volatile organic compounds) containing compounds, solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure (exclusive of water) must be contained unless in the immediate use of the operator shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably to minimize evaporation, leakage evaporate, leak, escape~~

~~or be otherwise or discharged~~ into the ambient air so as to cause or contribute to any of the conditions listed in Section 301.~~air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge,~~ The installation and use of such control methods, devices or equipment shall be mandatory to reduce effectively the contribution to conditions listed in Section 301 from material escape, shall be mandatory, if available.

~~303 REASONABLE STACK HEIGHT REQUIRED:~~ **301.2 Odors and Gaseous Air Contaminants Discharged to Adjoining Property:** Where a stack, vent or other outlet is at such a level that odors and gaseous air contaminants are discharged to adjoining property, the Control Officer may require the installation of either abatement equipment that will adequately reduce or eliminate the discharge of the odors or gases to adjoining property and/or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute disperse reduce or eliminate their discharge. of and gaseous air contaminants to adjoining property.

**302 LIMITATIONS FOR ALL SOURCES: - HYDROGEN SULFIDE:** ~~No person shall emit hydrogen sulfide from any location in such a manner or amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.~~

**302.1 Total Reduced Sulfur:** No person shall emit Total Reduced Sulfur from any source in such a manner or amount that the concentration of such emissions into the ambient air, beyond the premises on which the source is located, exceeds 0.03 parts per million (0.03 ppm) for any average period of 30 minutes.

**302.2 Carbon Monoxide:** No person shall emit into the ambient air carbon monoxide in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding the following National Ambient Air Quality Standards:

**a. 1-hour Concentration:** The maximum allowable 1-hr. concentration shall be 35 ppm (40 mg/m<sup>3</sup>). This concentration shall not be exceeded more than once per year at any one location.

**b. 8-hour Concentration:** The maximum allowable 8-hr. concentration shall be 9 ppm (10 mg/m<sup>3</sup>). This concentration shall not be exceeded more than once per year at any one location.

**302.3 Hydrogen Cyanide:** No person shall allow hydrogen cyanide gas to be emitted from any source in such manner and amount that the concentration of such emissions, into the ambient air, beyond the premises on which the source is located, exceeds 0.3 ppm by volume for an averaging period of eight hours.

**302.4 Sodium Cyanide Dust:** No person shall allow sodium cyanide dust or dust from any other solid cyanide, to be emitted from any source in such manner and amount, that the concentration of such emissions into the ambient air, beyond the premises on which the source is located, exceeds 140 micrograms per cubic meter for any averaging period of eight hours.

**303 ADDITIONAL STANDARDS OF PERFORMANCE FOR SPECIFIED SOURCES:**

**303.1 Effluent From Animal And Vegetable Matter Rendering:** No person shall operate or use any machine, equipment or other contrivance for the rendering of animal or vegetable matter, separately or in combination, unless all gases, vapors and gas-entrained effluents have been:

- a. Burned to destruction or reduction at a temperature of not less than 1250 ° Fahrenheit and not less than 0.5 seconds residence time.

**303.2 Operating Requirements - Asphalt Kettles and Asphalt Dip Tanks:**

- a.No person shall discharge into the ambient air from any asphalt kettle or asphalt dip tank any air contaminant, other than combined water, in excess of 20% opacity.
- b. No person shall operate an asphalt kettle or asphalt dip tank unless the owner or operator controls air contaminant emissions by standard practices, including but not limited to:
  - 1. Maintenance of temperature below both the asphalt flash point and the maximum temperature recommended by the asphalt manufacturer through the use of automatic temperature controls.
  - 2. Operation of the asphalt kettle or asphalt dip tank with the lid closed except when charging.
  - 3. Pumping or drawing the asphalt through cocks without dipping.
  - 4. Firing of the asphalt kettle or asphalt dip tank with a clean burning fuel.
  - 5. Maintaining the asphalt kettle or asphalt dip tank in clean, properly adjusted and good operating condition.

**304 ADDITIONAL LIMITATIONS FOR SPECIFIED SOURCES**

**LIMITATION 304.1--Sulfur Dioxide And Sulfuric Acid Mist From Sulfuric Acid Plants:**

No person shall emit or discharge into the atmosphere more than 4.0 pounds of sulfur dioxide or 0.15 pounds of sulfuric acid mist per ton of sulfuric acid produced (calculated as 100 percent H<sub>2</sub>SO<sub>4</sub>) maximum two



hour average, from facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans or acid sludge.

**304.2- Sulfur Limitations in Fuel: Sulfur Dioxide From Electrical Power**

**Plants:** All ~~-advanced combustion resources and boilers, —~~ facilities operated for the purpose of producing electric power with a resulting discharge of sulfur dioxide in the facility's effluent gases, shall ~~only use~~ only low sulfur oil.

**Steam Plants Using Low Sulfur Oil — After May 30, 1972:** Existing units which commenced construction or a major modification after May 30, 1972, shall not emit more than 0.8 pounds of sulfur dioxide, maximum three hour average, per million BTU heat input when low sulfur fuel is used.

**Steam Plants Using Low Sulfur Oil — Prior to May 30, 1972:** Existing steam power generating facilities which commenced construction or a major modification prior to May 30, 1972, shall not emit more than 1.0 pounds of sulfur dioxide, maximum three hour average, per million BTU heat input when low sulfur oil is fired.

**Steam Plants Using High Sulfur Oil:** All existing steam power generating facilities which are subject to the provisions of this rule shall not emit more than 2.2 pounds of sulfur dioxide, maximum three hour average, per million BTU heat input when high sulfur oil is fired.

**Permit Conditions — High Sulfur Oil:** Any permit issued for the operation of an existing source, or any renewal or modification of such a permit, shall include a condition prohibiting the use of high sulfur oil by the permittee. The applicant must demonstrate to the Control Officer that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to insure that the sulfur dioxide ambient air quality standards set forth in Rule 510 of these Regulations will not be violated. The terms of the permit may authorize the use of high sulfur oil under such conditions as are justified. In cases where the permittee is authorized to use high sulfur oil, it shall submit to the Bureau monthly reports detailing its efforts to obtain low sulfur oil. When the conditions justifying the use of high sulfur oil no longer exist, the permit shall be modified accordingly.

**307 — LIMITATION — SULFUR FROM OTHER INDUSTRIES:** No person shall discharge into the atmosphere from any other industry not covered in other sections of this rule reduced sulfur, which includes sulfur equivalent from all sulfur emissions including but not limited to sulfur dioxide, sulfur trioxide and sulfuric acid, in excess of ten percent of the sulfur entering the process as feed.

**308 304.3** ~~LIMITATION~~ **Nitrogen Oxides From Electrical Power Plants:** This section applies to facilities advanced combustion resources and boilers operated for the purpose of producing electric power with a resulting discharge of nitrogen oxides.

**308.1304.4** ~~Steam Plants~~ **Electrical Power Plants** ~~-Using Gaseous Fossil Fuel:~~ Existing steam power generating facilities advanced combustion resources or boilers, which commenced construction or a major modification after May 30, 1972, shall not emit more than 0.2 pounds of nitrogen oxides, maximum three hour average, calculated as nitrogen dioxide, per million BTU heat input when gaseous fossil fuel is fired.

**308 304.5** ~~Steam Plants~~ **Electrical Power Plants** ~~-Using Liquid Fossil Fuel:~~ Existing advanced combustion resources or boilers, ~~steam power generating facilities~~ which commenced construction or a major modification after May 30, 1972, shall not emit more than 0.3 pounds of nitrogen oxides, maximum three hour average, calculated as nitrogen dioxide, per million BTU heat input when liquid fossil fuel is fired.

### ~~309 OPERATING REQUIREMENTS - ASPHALT KETTLES AND DIP TANKS:~~

**309.1** ~~No person shall operate an asphalt kettle or dip tank unless the owner or operator controls air contaminant emissions by good modern practices, including but not limited to:~~

- ~~a. Maintenance of temperature below both the asphalt flash point and the maximum temperature recommended by the asphalt manufacturer through the use of automatic temperature controls.~~
- ~~b. Operation of the kettle or dip tank with the lid closed except when charging.~~
- ~~c. Pumping or drawing the asphalt through cocks without dipping.~~
- ~~d. Firing of the kettle or dip tank with a clean burning fuel.~~
- ~~e. Maintaining the kettle or dip tank in clean, properly adjusted and good operating condition.~~

**3059.2** ~~The visible emissions from the operation of an asphalt kettle or dip tank shall comply with the provisions of Rule 300~~

**310** ~~**CARBON MONOXIDE:** The discharge of carbon monoxide emissions from any process source shall be effectively controlled by means of secondary combustion.~~

**311** ~~**EXEMPTIONS:** Section 305 of this rule shall not apply to existing sources nor to metallurgical plants or other facilities where conversion to sulfuric acid is utilized as~~

~~a means of controlling emissions to the atmosphere of sulfur dioxide or other compounds.~~

## **SECTION 400 – ADMINISTRATIVE REQUIREMENTS**

**401 COMPLIANCE SCHEDULE:** The provisions of this rule become effective on (date of adoption). An owner or operator shall be in full compliance with all applicable requirements of this rule no later than 180 days after the (date of adoption).

## **SECTION 500 – MONITORING AND RECORDS**

**501 RECORDKEEPING AND REPORTING:** Records shall be retained for five years and shall be made available to the Control Officer upon request. Any person subject to this rule shall comply with the following minimum requirements if the source of the air contaminants is from one of the following specified -sources:

**501.1 Animal And Vegetable Matter Rendering:** Daily recordkeeping shall consist of the nature and amount of raw animal or vegetable material that is rendered, operating temperatures of the cooking device, start-up and shut-down times of operation and the amount and type of fuel used.

**501.2 Sulfur Dioxide And Sulfuric Acid Mist From Sulfuric Acid Plants:** Daily recordkeeping shall consist of the type and amount of fuel used, sulfur content of the fuel, operating temperature of the absorption column and the start-up and shut-down hours of operation.

**501.3 Sulfur Dioxide From Electrical Power Plants:** Daily recordkeeping shall consist of the type of fuel used, sulfur content of the fuel, total heat input each hour of operation in MM BTU and the start-up and shut-down hours of operation.

**501.4 Nitrogen Oxides From Electrical Power Plants: :** Daily recordkeeping shall consist of the type of fuel used, total heat input each hour of operation in MM BTU and the start-up and shut-down hours of operation.

**501.5 Asphalt Kettles And Dip Tanks:** Daily recordkeeping shall consist of the amount of asphalt processed.

**502 COMPLIANCE DETERMINATION:** The test methods for those subparts of 40 CFR Part 60, Appendix A and 40 CFR Part 75, Appendix D, July 1, 1998, as listed in Section 504 of this rule, are adopted by reference as indicated. This adoption by reference includes no future editions or amendments. Copies of test methods referenced in Section 504 are available at the Maricopa County Environmental Services Department, 1001 North Central Avenue, Phoenix, AZ, 85004-1942.

**503 TEST METHODS:**

**503.1 Sulfur Dioxide:** The emissions of sulfur dioxide shall be determined according to EPA Reference Method 19, 40 CFR, Part 60, Appendix A.

**503.2 Nitrogen Oxide:** The emissions of nitrogen oxides shall be determined according to EPA Reference Method 19, 40 CFR, Part 60, Appendix A.

**503.3 Opacity Determinations:** The opacity determination shall be determined according to EPA Reference Method 9, 40 CFR, Part 60, Appendix A.

**503.4 Sulfur Content in Fuels:** The sulfur content in fuel shall be determined according to one of the following ASTM Standards: ASTM D129-91, ASTM D1552-90, ASTM D2622-92 or ASTM D4294-90 as referenced in 40 CFR Part 75, Appendix D.